

REMARKS

The claims are claims 1, 6, 10 and 15.

Claims 1, 6 and 10 are amended. Claims 2, 4, 7 and 12 to 14 are newly canceled. New claim 15 is added. Claim 1 is amended in response to the rejection under 35 U.S.C. 112 and to incorporate limitations previously recited in canceled claim 12. Claim 6 is amended to depend upon claim 1 rather than canceled claim 5. Claim 10 is amended to incorporate limitations previously recited in canceled claim 14. New claim 15 recites the same limitation as claim 6 except dependent upon apparatus claim 10.

Claims 1, 2, 6, 7 and 12 were rejected under 35 U.S.C. 102(e) as anticipated by Thompson, U.S. Patent No. 6,681,059.

Claim 1 recites subject matter not anticipated by Thompson. Claim 1 recites that "each set of n coefficients summing to a normalization value of an integral power of 2, and each coefficient of each set of n coefficients being an integral factor of said normalization value." This limitation is incorporated from canceled claim 12. The OFFICE ACTION states at page 3, lines 5 and 6:

"As per claim 12, Brown also disclose in figure 5, the normalization values being 1 (79) which is an integral power of 2, and each coefficient is an integral factor of."

The Applicants' believe the reference to "Brown" should be to "Thompson" the reference cited in paragraph 4 of the OFFICE ACTION. The Applicants respectfully submit that Thompson includes no teaching that each coefficient of each set is an integral factor of the normalization value of that set. Thus Thompson fails to teach this limitation of claim 1. In addition, Thompson teaches that the sum of coefficients in each set is 1. As well know in mathematics, the number 1 has no integral factors other than itself. Thus it is mathematically impossible to provide plural coefficients that sum

to 1 and are each an integral factor of 1. Accordingly, claim 1 is allowable over Thompson.

Claim 6 recites subject matter not anticipated by Thompson. Claim 6 recites "said nonlinear curve is $\sin(x)/x$." The Applicants respectfully submit that Thompson includes no teaching of this function $\sin(x)/x$ also known as $\text{sinc}(x)$. The FINAL REJECTION cites Figure 6 of Thompson as teaching this nonlinear curve. It appears clear that Figure 6 of Thompson shows a symmetrical curve. However, Figure 6 does not show a curve symmetrical about $x=0$ as is known for the $\sin(x)/x$ function. Accordingly, claim 6 is allowable over Thompson.

Claims 10 and 13 were rejected under 35 U.S.C. 103(a) as made obvious by the combination of Thompson, U.S. Patent No. 6,681,059, and Lin, U.S. Patent No. 5,287,299.

Claim 10 recites subject matter not made obvious by the combination of Thompson and Lin. Claim 10 recites that "each set of n coefficients summing to a normalization value of an integral power of 2, and each coefficient of each set of n coefficients being an integral factor of said normalization value." The Applicants respectfully submit that Thompson includes no teaching that each coefficient of each set is an integral factor of the normalization value of that set. Thus Thompson fails to teach this limitation of claim 1. In addition, Thompson teaches that the sum of coefficients in each set is 1. As well known in mathematics, the number 1 has no integral factors other than itself. Thus it is mathematically impossible to provide plural coefficients that sum to 1 and are each an integral factor of 1. The FINAL REJECTION does not allege that Lin includes any teaching regarding this limitation. Accordingly, claim 10 is allowable over the combination of Thompson and Lin.

New claim 15 recites the limitations of claim 6 except dependent upon apparatus claim 10. Lin contains no teaching of a

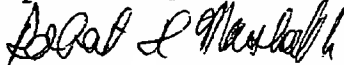
sine function and therefore adds nothing to the teaching of Thompson to make obvious the $\sin(x)/x$ nonlinear curve recited in claim 15. Therefore claim 15 is allowable over the combination of Thompson and Lin.

The Applicants respectfully request entry and consideration of this amendment. Entry of this amendment is proper at this time because the amendment serves only to clarify subject matter previously recited. Thus no new search or reconsideration is required.

The Applicants respectfully submit that all the present claims are allowable for the reasons set forth above. Therefore early entry of this amendment, reconsideration and advance to issue are respectfully requested.

If the Examiner has any questions or other correspondence regarding this application, Applicants request that the Examiner contact Applicants' attorney at the below listed telephone number and address to facilitate prosecution.

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Respectfully submitted,

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